

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An isolated RNA comprising:
an artificial intron containing a gene silencing effector,
wherein said gene silencing effector is an RNA capable of silencing a target gene when the artificial intron is released in a cell, the function of a target gene is silenced.
2. (Previously Presented) The isolated RNA of claim 1, wherein the artificial intron RNA contains a splice donor site, a splice acceptor site, a branch site, and a poly-pyrimidine tract.
3. (Previously Presented) The isolated RNA of claim 1, wherein the cell is a mammalian cell.
4. (Previously Presented) The isolated RNA of claim 2, wherein the splice donor site contains 5'-AGGUAAGU-3'.
5. (Previously Presented) The isolated RNA of claim 2, wherein the splice acceptor site contains 5'-CCACAGC-3'.
6. (Previously Presented) The isolated RNA of claim 2, wherein the branch site contains 5'-UACUAAAC-3'.

7. (Currently Amended) An isolated RNA comprising an artificial intron RNA containing a gene-silencing effector, wherein said gene-silencing effector is an RNA that is capable of silencing a target gene when released in a eukaryotic cell, ~~thereby silencing the function of a target gene.~~

8. (Currently Amended) An isolated RNA comprising an artificial intron RNA containing a gene-silencing effector, said gene-silencing effector is an RNA that is capable of silencing a target gene released in a eukaryotic cell, ~~thereby silencing the function of a target gene,~~ and wherein the artificial intron RNA contains a splice donor site that includes 5'-AGGUAAGU-3', a splice acceptor site that includes 5'-CCACAGC-3', a branch site that includes 5'-UACUAAC-3', a poly-pyrimidine tract that includes 5'-UUCUUUUUUC-3' (SEQ ID NO:2), or a combination thereof.

9-10. (Canceled)

11. (Original) A cultivated cell comprising the isolated RNA of claim 1.

12-18. (Canceled)

19. (Original) A composition comprising the isolated RNA of claim 1.

20-57. (Canceled)

58. (Previously Presented) The isolated RNA of claim 1, wherein the artificial intron contains a sequence that targets an exon of the target gene, wherein the target gene is integrin β 1.

Appl. No. 10/663,875
Amdt. Dated August 18, 2011
Reply to Office Action of April 18, 2011

Attorney Docket No. 374634-000011
Customer No.: 73230

59. (Previously Presented) The isolated RNA of claim 7, wherein the artificial intron contains a sequence that targets an exon of the target gene, wherein the target gene is integrin β 1.

60. (Previously Presented) The isolated RNA of claim 8, wherein the artificial intron contains a sequence that targets an exon of the target gene, wherein the target gene is integrin β 1.